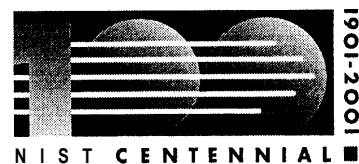


NISTIR 6774

Workshop On Fire Testing Measurement Needs: Proceedings

William Grosshandler
(Editor)



NIST

National Institute of Standards and Technology
Technology Administration, U.S. Department of Commerce

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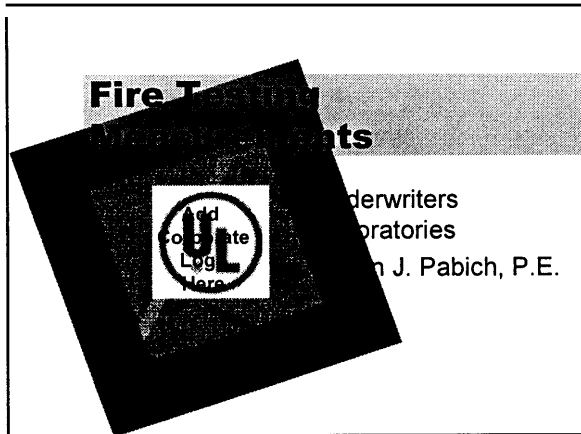
Building and Fire Research Laboratory

August 2001



U.S. Department of Commerce
Donald Evans, Secretary

National Institute of Standards and Technology
Dr. Karen H. Brown, Acting Director



Know What You Are Looking For!

- **Timing**
- **Temperature**
- **Velocity**
- **Heat Flux**
- **Species Generation**

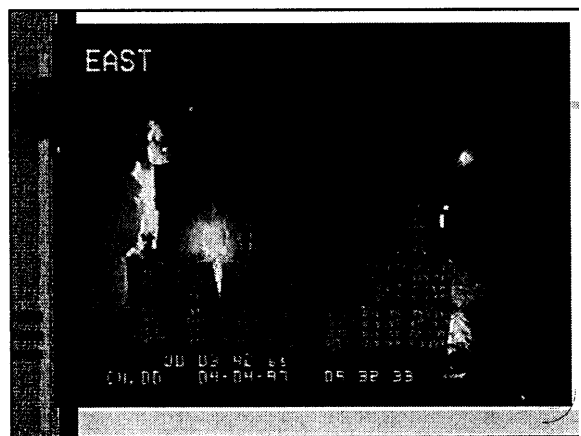
Know What You Are Planning to do With Data

- **Report as Fact**
- **Use in Calculations**

Large Scale Fire Testing

Generally wide discretion is acceptable

- Test Time of 30 Minutes
- Number of Sprinkler Operations
- Extent of Fire Spread in Large Array
- Data **is** reported as fact and not typically used in calculation or modeling procedures



Small Scale

Tighter discretion required

- Event occurrences have a greater probability of being used in computation/ modeling procedures
- It again falls back to knowing what you want and how it is going to be used.
- Sprinkler operating temperatures and times do not require the same scrutiny as that given to material ignition and times.

Calorimetry

Though based upon the same principles, cone testing and products collector testing are influenced by fuel geometry.

It is imperative that the equipment is calibrated to known standards and properly sized to work in the expected range of results.



Calibration

- Use accepted techniques.
- Use known Standards.
- Operate with proper knowledge, skills, and abilities.
- Maintain accurate records.
- When in doubt recheck or recalibrate.

